

# **Arizona FIRE MAP Fuels Treatments Module**

is a project initiated on the request of and with guidance from

**Mapping & Assessment Subcommittee**  
<http://www.governor.state.az.us/FHC/Subcommittee%7EMA.html>  
**of the**  
**Arizona Governor's Forest Health Councils**  
<http://www.governor.state.az.us/FHC/>

## **Arizona FIRE MAP: Background**

In February, 2004, the Forest Health Advisory and Oversight Councils began to formally address the need for mapping and assessment tools that could facilitate the integration of forest health data across jurisdictions to facilitate planning, reporting and decision making. The most pressing need: statewide fuels treatments data management, visualization, and reporting. The Councils tasked the newly formed Mapping & Assessment Subcommittee (M&A) with making recommendations on the development of an on-line application that could facilitate data sharing, data standardization, and reporting using the fuels treatments example as the initial challenge to be addressed. Members of M&A specified the fundamental need and then sought out the resources to develop a prototype application, which they named Arizona FIRE MAP – which stands for the Arizona Fuels, Information, Restoration, and Education Mapping and Assessment Program.

Phase 1 of Arizona FIRE MAP is the Fuels Treatments Module, a prototype application being developed courtesy of funding from Arizona Department of Emergency and Military Affairs (through the State Forester, State Lands Department, and the State Cartographer's Office). User specifications were developed by Kathy Hemenway (with support from Environmental Economic Communities Organization (EECO)) as part of efforts to identify and encourage participation from a wide range of federal, state, tribal and local data providers. The State Cartographers Office (SCO), with guidance from M&A members, completed specification of application functionality, fine-tuned the data model, set data collection parameters, coordinated data collection efforts, and normalized data sets for inclusion in the system. The Arizona Remote Sensing Center (ARSC) at the University of Arizona will complete developing the web application in June 2005.

## **What is Arizona FIRE MAP, Phase 1 - Fuels Treatments Module?**

Arizona FIRE MAP – Phase 1 is an interactive, spatially dynamic web application focused on providing access to the geographic location of ***fuels treatments*** and associated data (attributes) reported by those conducting the treatments (e.g. treatment method, status, area, etc.). The locations of Arizona fuels treatments provided for the prototype application are displayed as geographic point locations. In cases where polygon data (areas) have been provided, mapped treatment boundaries may also be displayed.

This web application offers two fundamental methods to query (search) the fuels treatments data.

First, a simple text-based search can be formulated (e.g., “find all prescribed burn treatments for 2004”) and refined (e.g., “and limit this search to treatments conducted by a specific organization”).

Second, fuels treatments can be accessed spatially through an interface that permits a user to zoom in on an area of interest (displaying all treatments that are in the database for that area), with the option of filtering the search by several key parameters in the database (e.g., treatment method, organization, etc.).

While Arizona FIRE MAP – Phase 1 is an application focused on fuels treatments data, a range of reference mapping data can be overlaid to provide context. These maps consist of “framework data”, “contextual data”, and the treatment data itself. Framework data are standardized spatial data layers (e.g., roads, administrative boundaries, etc.). Contextual data layers consist of data layers related to forest health that have not yet been standardized across jurisdictions (e.g. historical major fire perimeters, CWPP planning areas, etc.).

The application will have a number standard reports. It will also permit the user to customize reports to the query parameters employed. Customized reports can be organized by the level of detail required: overall summary, project and treatment. These reports will include an overview map at the corresponding scale. In cases where a query was based on tabular data, the treatments identified by the search will be included in the map. In cases where the query was generated through the map interface, the area selected will delimit the map boundaries.

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